

### REMARKS

This paper is responsive to the Examiner's Office action mailed January 19, 2000.

Referring to the Preliminary Amendment filed with the request for filing of the Continuing Prosecution Application (CPA), applicant understands the Examiner's position to be that the new claims 13-19 are merely informal and are not "non-responsive." In fact, the Preliminary Amendment was not filed "responsive" to any action, paper or requirement, but among other things to put into the new CPA application the new claims.

Accordingly, the Preliminary Amendment was just that, "preliminary," and was filed with the request for filing a CPA. As such, the CPA as filed on January 5, 2000 included the exact claims noted as copied from U.S. Patent No. 5,855,149; the claims were filed and presented on that date, and the claims in the CPA are for the same subject matter as that noted in the Preliminary Amendment.

Applicant files this amendment merely to correct the formality matter pointed out by the Examiner, namely the deleting of the underlining in claims 13-19.

Examination of proceedings on the CPA as modified by the Preliminary Amendment are respectfully requested.

Claims 13-15 are copied verbatim from U.S. Patent No. 5,855,149 granted January 5, 1999 to Islam et al. and assigned at issue to National Research Council of Canada. Claim 16 substantially corresponds to claims of that patent. Claims 13-15 correspond to Islam's claims 1, 2 and 4, respectively. Claim 16 corresponds substantially

at least to Islam's claim 1. In accordance with 37 C.F.R. 1.607(a), the copied claims may be specifically applied to applicants' disclosures as follows:

<b>Copied Claim</b>	<b>Applicant's Disclosure</b>
13. (New) A process for producing a cutting die having a metal base which carries a sharpened ridge extending along a predetermined path thereon, said ridge being of a composition distinct from said base, comprising the steps of;	page 7, line 22 - page 8, line 5 page 8, line 21 - page 9, line 10 page 11, line 15 - page 12, line 3
a) moving a laser beam along said path to heat the base metal and simultaneously supplying powdered metal having a composition distinct from said base to said predetermined path via a tube moving concurrently with said laser beam so that said laser beam surface melts a thin layer of the metal base along said path and also melts the metal powder being delivered to the base and thus forms a band of fused metal powder along said path,	page 7, lines 8-13 page 8, lines 6-11 page 11, lines 10-15 page 12, lines 18-21
b) repeating steps a) so as to heat and melt a thin layer of the previously deposited metal along with additional metal powder to form an additional layer metallurgically bonded to the first layer, and	page 7, lines 16-17 page 15, lines 17-20
c) repeating step b) to produce multiple layers until a ridge of metal is formed along said path, said ridge having a substantially uniform height and width, and	page 7, lines 16-17 page 15, lines 17-20
d) sharpening the ridge so formed to suit it for use in cutting.	page 7, lines 8-13 page 8, lines 12-14 page 12, line 21 - page 13, line 2 page 14, lines 5-10

### **Copied Claim**

### **Applicant's Disclosure**

14. (New) A process according to claim 13, wherein the metal base is cylindrical, the process including rotating the base to provide one component of relative motion between said base and said laser beam.

Page 10, line 20 - page 11, line 2  
Page 11, lines 7-8

15. (New) A process according to claim 13, wherein after said sharpening step, said ridge is heat treated using heat from said laser beam.

page 7, lines 13-14  
page 13, lines 3-10

New claims 16-19, further in accordance with 37 C.F.R. 1.607(a), are applied to the application as follows:

### **New Claim**

### **Applicant's Disclosure**

16. (New) A process for producing a cutting die having a metal base which carries a sharpened ridge extending along a predetermined path thereon, said ridge being of a composition distinct from said base, comprising the steps of;

page 7, line 22 - page 8, line 5  
page 8, line 21 - page 9, line 10  
page 11, line 15 - page 12, line 3

a) moving a laser beam along said path to heat the base metal and simultaneously supplying powdered metal having a composition distinct from said base to said predetermined path via a tube moving concurrently with said laser beam so that said laser beam surface melts a thin layer of the metal base along said path and also melts the metal powder being delivered to the base and thus forms a band of fused metal powder along said path,

page 7, lines 8-13  
page 8, lines 6-11  
page 11, lines 10-15  
page 12, lines 18-21

### **New Claim**

### **Applicant's Disclosure**

b) repeating steps a) so as to heat and melt a thin layer of the previously deposited metal along with additional metal powder to form an additional layer metallurgically bonded to the first layer, and

page 7, lines 16-17  
page 15, lines 17-20

c) repeating step b) to produce multiple layers until a ridge of metal is formed along said path, and

page 7, lines 16-17  
page 15, lines 17-20

d) sharpening the ridge so formed to suit it for use in cutting.

page 7, lines 8-13  
page 8, lines 12-14  
page 12, line 21 - page 13, line 2  
page 14, lines 5-10

17. (New) A process for forming a cutting die comprising the steps of:

page 7, lines 7-13  
page 7, line 22 - page 8, line 5  
page 8, lines 6-11  
page 8, line 21 - page 9, line 10  
page 11, line 10 - page 12, line 3  
page 12, lines 18-21

cladding a blade material onto a die surface of a material different than said blade material to form a blade extending outwardly from said surface, said cladding step including the steps of heating an area of said die surface, and introducing blade material into the heated area and building a blade of said different blade material outwardly from said surface; and

shaping the cladded blade.

page 7, lines 13-14  
page 13, lines 3-10

### **New Claim**

### **Applicant's Disclosure**

18. (New) A process for forming a cutting die comprising the steps of:

page 7, lines 7-13  
page 7, lines 16-17  
page 15, lines 17-20

cladding a blade material onto a die surface to form a blade extending outwardly from said surface, said cladding step including the steps of heating an area of said die surface, and introducing blade material into the heated area in at least two layers and building a blade of said material outwardly from said surface; and

shaping the cladded blade.

page 7, lines 8-13  
page 8, lines 12-14  
page 12, line 21 - page 13, line 2  
page 14, lines 5-10

19. (New) The process of claim 18, wherein the die surface is made of a material different than the blade material clad thereon.

page 7, line 22 - page 8, line 5  
page 8, line 21 - page 9, line 10  
page 11, line 15 - page 12, line 3

Pursuant to 37 C.F.R. § 1.607(a)(1), applicant "presents" the following proposed count one:

Count 1. A process for forming a cutting die comprising the steps of:

cladding a blade material onto a die surface to form a blade extending outwardly from said surface, said cladding step including the steps of heating an area of said die surface, and introducing blade material into the heated area and building a blade of said material outwardly from said surface; and

shaping the cladded blade.

Alternatively, applicant proposes new claims 17 and/or 18 as the count(s).

Applicant submits patented claims 1, 2 and 4 correspond at least substantially to the proposed count or counts. At least original claims 2 of the application corresponds exactly to the initially proposed count. Newly added claims 13-19 correspond substantially to the proposed count or counts in that each contains each element of at least one of the proposed counts.

Applicant claims benefit of the effective filing date of September 25, 1998 (applicant's serial no. 09/160,991, its parent) and of the effective filing date of February 16, 1996 (serial no. 08/602,379, its parent).

Because the subject application is a continuing prosecution application of application serial no. 09/160,991 filed on September 25, 1998, which in turn was filed as a continuation application under 37 C.F.R. § 1.60 of prior application serial no. 08/602,379 filed on February 16, 1996, applicant is entitled to the effective date of February 16, 1996. That date is approximately nine months before the application that matured into Patent No. 5, 855,149 filed on November 18, 1996 (from which claims herein are copied), and applicant is the senior party. Applicant need not make a showing under § 1.608 because the basis upon which applicant is entitled to a judgement relative to the patentee is that the applicant has the earliest effective filing date. 35 U.S.C. § 135(b) is not relevant because this application and preliminary amendment herein is being filed within the period set forth in that statute.

Applicant reserves the right and requests to designate claims of its application as corresponding to any count finally set by the Examiner.

Respectfully submitted,

WOOD, HERRON & EVANS, L.L.P.

By: Kristi L. Davidson  
Kristi L. Davidson  
Reg. No. 44,643

WOOD, HERRON, & EVANS L.L.P.  
2700 Carew Tower  
Cincinnati, OH 45202  
(513) 241-2324 (voice)  
(513) 421-7269 (facsimile)

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